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REMARKS

No new matter is added by the amendment. The present application is a continuation of application serial no. 09/535,411 filed March 24, 2000. In a preliminary amendment, claims 1-19 were cancelled and new claims 20-51 were added. Claims 20, 29, 40, and 48 are independent claims.

The Examiner objected to claims 27 and 37, but indicated that they contained allowable subject matter. This is noted with appreciation.

Claims 20-22, 28-31, 33, 38-42, and 46-50 were rejected under 35 USC §102(a) as being anticipated by U.S. Patent 5,103,486 issued April 7, 1992 to Victor J. Grippi ("Grippi"). This rejection is respectfully traversed. Several minor modifications were made to the claims, without adding any new matter thereto. Applicant has made these amendments solely to provide clarification and add consistency to the claims and move the application towards issuance.

The test for determining if a reference anticipates a claim, for purposes of rejection under 35 USC §102, is whether the reference discloses all of the elements of the claimed combination, or the mechanical equivalents, functioning in substantially the same way to produce substantially the same results. As noted by the Court of Appeals of the Federal Circuit in *Lindemann Maschinenfabrik GmbH v. American Hoist and Derrick*, 221 USPQ 481, 485 (1984), in evaluating the sufficiency of an anticipation rejection under 35 USC §102, the Court stated:

"Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim."

Independent claim 20 sets forth a stylus for use as an identity verification device coupled to a processor. The stylus includes a stylus body and a sensor coupled to the stylus body. The sensor is adapted to capture a thumbprint of a user as a user finger touches the sensor.

In contrast, Grippi discloses a hand held writing implement 10 which differs from the present invention as embodied in independent claim 20, in at least two ways. First, the Grippi stylus 10 does not teach the capture of the thumbprint. As shown in Figures 2 and 3, the stylus 10 includes a prism detector 14 and a fingerhood which is located adjacent the prism detector 14

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(see column 4, lines 39-51). The prism detector 14 is inlaid within the stylus 10. The fingerhood houses an LED 20 and a photodiode 22 which are used to detect the presence of a finger. The fingerhood is designed to allow positioning the subject finger along an axis conducive to detection. However, as shown, the only finger conducive to detection using the only disclosed embodiment of the Grippi reference is the "index" finger when a user attempts to sign their signature. Thus, the Grippi device cannot be used to capture the thumb print of a user.

Furthermore, the separate detection array 72 does not "capture a thumbprint of a user as a user thumb touches the sensor". Rather, the Grippi device 10 requires *manual actuation of a separate switch 36* (see column 8, line 59 to column 9, line 2).

Furthermore, a traditional sensor responds to an input quantity by generating a functionally related output, usually in the form of an electrical or optical signal. The sensor generally involves data capture of a condition, such as temperature, pressure, brightness, field strength, or motion. While, the Grippi on-line verification system 66 does include data capture (referred to as the "X-Y strobe" in column 7, lines 15-18), the Grippi stylus 10 does not. Once LED 20 and photodiode 22 detect the presence of the finger, the Grippi stylus 10, using prism 14 and directional mirror 60 (comprising 58, 60, 62, 64) directs an internally reflected image of the fingerprint (see column 6, lines 1-24) onto detection array 72 which is located on verification system 66 separate and apart from the Grippi stylus 10. Since the recording surface, where the "X-Y strobe" actually takes place, is exterior to the Grippi stylus 10, all of the necessary elements for a full sensing means are contained in stylus 10.

By including the data capture and memory inside Applicant's stylus, such stylus is compatible with any conventional signature pad, or touch-sensitive screen. Also, Applicant's stylus can be used to confirm any writing, not just the signature. In addition, Applicant's stylus can either be tethered or wireless, the wireless embodiment being particularly useful in controlled environments (hospitals, military bases, and cruise ships), where each user carries his/her own stylus.

As explained above, Applicant respectfully asserts that the Grippi stylus 10 does not include a sensor that captures the thumbprint of a user as required by independent claim 20. Since Grippi does not include one or more limitations of independent claim 20, Applicant

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respectfully asserts that the §102(a) rejection of independent claim 20 is improper and must be withdrawn.

Claims 21, 22, and 28 are ultimately dependent upon allowable claim 20. Therefore, for the reasons set forth above and based on their own merits, applicant respectfully asserts that claims 21, 22, and 28 are also allowable.

Independent claim 29 sets forth an identity verification device with a stylus, a sensor, a memory device and a processor. The stylus has a body. The sensor is coupled to the body and is adapted to capture a thumbprint of a user as a user's thumb touches the stylus body. The memory device stores at least one reference print. The processor is coupled to the sensor and the memory device and is adapted to receive the captured thumbprint and to compare the captured thumbprint with the at least one reference print.

As discussed above, the Grippi device 10 does not include a stylus with a sensor that captures the thumbprint. Rather, the Grippi device 10 simply optically relays, without physical connection, an image to a detection array 72 which is located separately on a separate device.

In addition, the separate detection array 72 of the Grippi reference does not "capture a thumbprint of a user as a user's thumb touches the stylus body" as noted above but, rather, the Grippi device 10 requires *manual actuation of a separate switch 36* (see column 8, line 59 to column 9, line 2).

Since Grippi does not include one or more limitations of independent claim 29, Applicant respectfully argues that the §102(a) rejection of independent claim 29 is improper and must be withdrawn.

Claims 30-31, 33, and 38-39 are ultimately dependent upon allowable claim 29. Therefore, for the reasons set forth above and based on their own merits, applicant respectfully asserts that claims 30-31, 33, and 38-39 are also allowable.

Independent claims 40 and 48 set forth a stylus having a body, a sensor, and memory device, and a processor. The sensor is coupled to the body and is adapted to capture a fingerprint of a user as the user grasps the stylus. The memory device is within the body and is adapted to store at least one reference fingerprint. The processor is within the body and is coupled to the sensor and the memory device. The processor is adapted to receive the captured fingerprint. The

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processor is adapted to compare the captured fingerprint with the at least one reference fingerprint.

As discussed above, the Grippi device 10 does not include a sensor coupled to a stylus that captures a fingerprint as the user grasps the stylus. Furthermore, the Grippi device 10 does not include a memory device or a processor within the body of its device 10.

For these reasons, Applicant respectfully asserts that Grippi does not include each and every limitation of independent claims 40 and 48. Therefore, the §102(a) rejection of independent claims 40 and 48 is improper and must be withdrawn.

Claims 41-42 and claims 49-50 are dependent upon allowable claims 40 and 48. Therefore, for the reasons set forth above, Applicant respectfully assert that claims 41-42 and 49-50 are also allowable.

Claims 23-26, 32, 34-36, 43-45 and 51 were rejected under 35 USC §103(a) as being unpatentable over Grippi. This rejection is respectfully traversed. Claims 23-26 are dependent upon allowable claim 20. Claims 32 and 34-36 are dependent upon allowable claim 29. Claims 43-45 are dependent upon allowable claim 40. Claim 50 is dependent upon allowable claim 48. For the reasons sets forth above and based on their own merits, Applicant respectfully asserts that claims 23-26, 32, 34-36, 43-45 and 51 are allowable.

In the Examiner's §103(a) rejection (Page 4, Section 5), he attempts to take "Office Notice" of several facts, including that it would be obvious to modify Grippi such that: the processor is contained within the Grippi device 10 (claims 23, 32); the sensor (apparently referring to the optic components of the Grippi device 10 which are contained in the device) is digital (claims 24, 34, 43, 51); a memory device coupled to the sensor for storing the captured thumbprint is located in the Grippi device 10 (claims 25, 35); and the stylus is adapted to capture a second print (claims 26, 36, 45). The Examiner states that such features are "well known in the art".

Applicant hereby traverses the Examiner's attempts to take such facts as Official Notice, and respectfully challenges the Examiner's factual assertion as not properly officially noticed and based on common knowledge. Applicant requests that the Examiner reconsider and withdraw the rejection, in the absence of a showing of specific documents containing all of the

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claimed features of Applicant's claim invention, as well as the motivation in the prior art to combine those specific prior art documents in a way that teaches Applicant's invention.

Neither Grippi, either alone or in combination with the other art of record, supports such a finding. Grippi discloses a very specific (and peculiar device) which attempts to combine the signature of a user with a fingerprint. Two disclosed embodiments of this combined data are shown in Figures 8 and 9. In Figure 8, the signature and the fingerprint are combined into a single image. In Figure 9, fingerprint data is encoded or enclosed in one or more portions of the signature. In any event, Grippi requires both the fingerprint and the signature. To obtain the fingerprint, an image of the fingerprint is optically relayed from the device 10 to a detection array 72 located where the user writes their signature. The signature and the finger print sensor are thus captured, not at the device 10, but off of the device 10 by the detection array 72. Since Grippi also requires the signature, Grippi contains no teaching or motivation or suggestion to locate the sensor and/or any memory and/or the processor within the device 10.

Applicant, thus, traverses the Examiner's Official Notice of these facts and requires. The Examiner is required to provide "Adequate Evidence" as required in MPEP 2144.04(C).

The Applicant respectfully asserts that claims 20-51 of the present application are now in condition for allowance. If the Examiner believes that a telephone interview would be beneficial, please contact the undersigned at the number indicated.

Respectfully submitted,

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CERTIFICATE OF FACSIMILE

I hereby certify that this Amendment for United States Patent Application Serial Number 09/976,080 filed October 12, 2001 is being transmitted by facsimile to the United States Patent & Trademark Office to fax number (703) 872-9306 on March 2, 2005.


Melissa S. Dadisman